Artificial intelligence in logistics and supply chain management: A primer and roadmap for research

Abstract

The dawn of generative artificial intelligence (AI) has the potential to transform logistics and supply chain management radically. However, this promising innovation is met with a scholarly discourse grappling with an interplay between the promising capabilities and potential drawbacks. This conversation frequently includes dystopian forecasts of mass unemployment and detrimental repercussions concerning academic research integrity. Despite the current hype, existing research exploring the intersection between AI and the logistics and supply chain management (L&SCM) sector remains limited. Therefore, this editorial seeks to fill this void, synthesizing the potential applications of AI within the L&SCM domain alongside an analysis of the implementation challenges. In doing so, we propose a robust research framework as a primer and roadmap for future research. This will give researchers and organizations comprehensive insights and strategies to navigate the complex yet promising landscape of AI integration within the L&SCM domain.